Project No: 7100
Project Name: Water System Seismic Improvements

DRAFT

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AMENDMENT #3 TO AGREEMENT FOR CONSULTATION AND OTHER SERVICES (DRAFT)

This Amendment is entered into this 1st day of November 2005, by and between the City of Milpitas, a municipal corporation of the State of California (hereafter referred to as "CITY") and Damon S. Williams Associates, (hereafter referred to as "CONSULTANT").

RECITALS

WHEREAS, the parties entered into an Agreement for professional consulting for various Capital Improvement Projects, on August 3rd, 2004; and

WHEREAS, the parties amended the agreement on January 11, 2005 and January 18, 2005; and

WHEREAS, the parties desire to amend the Agreement to allow CONSULTANT to provide additional professional engineering services for various Capital Improvement projects.

NOW THEREFORE, in consideration of the mutual covenants and conditions herein contained, the parties agree to amend the Agreement as follows:

1. Section 2, entitled "Compensation" shall be increased by $39,760 from $68,780 to $108,540.

2. Task 10 and Task 11 of the Scope of Services (Exhibit A-3) is hereby accepted by the City and consultant as an active part of the contract.

3. Exhibit B, entitled "Compensation Schedule, Personnel, and Rates", is amended by adding "Note 3: Amendment #3 increases the project budget by $39,760 (from $68,780 to $108,540)".

4. The Consultant agrees to maintain and pay for all insurance policies as stated in Section 4, entitled "Insurance Requirements" of the Agreement dated August 3, 2004, between Consultant and the City of Milpitas. The Consultant shall provide the City with renewal certificates of the current policies upon the expiration of the current policy.

5. All other provisions of the Agreement shall remain in full force and effect.

This Amendment is executed as of the date written above.

APPROVED BY:

CITY OF MILPITAS

CONSULTANT

_____
City Engineer as to content

_____

_____
City Manager

_____
City Attorney as to Form

ATTESTED BY:

_____
City Clerk

EXHIBIT A-3

DRAFT

Scope of Work

City of Milpitas
Water System Seismic Improvements Strategic Plan
Additional Geotechnical Services

Project Description

The scope of work presented here is to supplement the original work done in developing a water system seismic improvements strategic plan for the City of Milpitas. Following submission of the Draft Water System Seismic Improvements Strategic Plan by DSWA in February 2005, the City has started to design a waterline improvement project (South Milpitas Blvd Water Line Replacement, Project No 7098) and is requesting some assistance to determine which of the liquefaction hazard zones the waterline will fall under (See Table 4-2 in Draft Report). Which zone it falls under, of course, will impact how the waterline is designed and constructed, and its cost. Project No 7098 is currently at 70 percent design.

In the design of Project No 7098, 5 borings were drilled down to 20 feet. Since the liquefaction potential was found to be low down to 20 feet, we are able to classify the area as having a moderate/low liquefaction potential. To be able to classify the area as having a low liquefaction potential, it is necessary to take borings down to 30 or 35 feet and confirm that all of the top 30 to 35 feet has a low liquefaction potential.

The first task in this scope for additional work is to conduct additional borings down to 35 feet, analyze the soils information, and provide a geotechnical report including which liquefaction hazard zone the waterline should fall under. This task will be identified as Task 10 of the overall project scope.

The second task in this scope is to provide a general procedure the City can use to evaluate liquefaction potential for future capital projects and determine which liquefaction hazard classification is appropriate. This procedure will be incorporated into the final draft of the Water System Seismic Improvements Strategic Plan. This task will be identified as Task 11 of the overall project scope.

Task Descriptions and Project Deliverables

Task 10-Project 7098 Geotechnical Evaluations

Objective

This task includes the following:

- Drilling 5 new borings down to 35 feet along the proposed waterline alignment; 6 borings were originally recommended, however, boring logs for a 40-foot deep boring from another project is very near the project site, so it will be used in the evaluation along with 5 new borings instead of drilling 6 new borings.
- Laboratory testing on soil samples
- Engineering Analysis and Report Preparation
- Two meetings and Consultations

See Attachment A for more detailed scope of geotechnical evaluations. This task covers items 1 through 4 in Attachment A.

Consultant Deliverables

- Identify location of borings for City approval on site plan taken from Project No 7098.
- 5 Copes if Draft Geotechnical Evaluation with results of soil laboratory analyses and recommended liquefaction hazard zone classification 10 Copies of Final Evaluation after incorporating City Comments
- Attend 2 consultation meetings and prepare minutes for all meetings summarizing all aspects of decisions made on how best to conduct the project and objectives.

City Deliverables

- Comments on boring location
- Comments on Draft Geotechnical Evaluation

Task 11-Develop Liquefaction Potential Evaluation Procedure Manual

Objective

The purpose of this task is to develop a manual to summarize field, laboratory, and engineering analyses methods to be used by the City to evaluate liquefaction potential of future capital projects. The procedure will be geared towards identifying which of the liquefaction hazard classification zones future projects will fall under based on Table 4-2 in the Draft Seismic Improvements Strategic Plan. This evaluation will be incorporated into the Final Draft of the Strategic Plan. This is item 5 in Attachment A.

Consultant Deliverables

- Develop a Draft Liquefaction Hazard Procedures Manual to be used by the City. Provide 5 copies of Draft Manual for City review.
- Incorporate Procedures Manual in Final Draft of Water System Seismic Improvements Strategic Plan

City Deliverables

- Comments on Draft Liquefaction Hazard Procedures Manual.

Fee Estimate

See Attachment B for detailed breakdown of Fee Estimate. Total fee estimate for Additional Services outlined in Tasks 10 and 11 is $39,760.

ATTACHMENT A
SCOPE FROM GEOTECHNICAL SUBCONSULTANT

AGS, Inc.
Consulting Engineers

DRAFT

October 24, 2005

Mr. Andre Gharagozian
Damon S. Williams Associates, LLC
180 Grand Avenue, Suite 1325
Oakland, California 94612-3754

Subject: Revised Proposal for Geotechnical Study
City of Milpitas Water System Seismic Improvements Strategic Plan
AGS Proposal No. KC1101

Dear Andre:

Following our telephone conversation and a review of the materials provided by you we are pleased to submit this revised proposal to perform a geotechnical study for the above-referenced project.

We understand that the proposed project will involve construction of approximately 4,000 feet of pipeline. The pipeline will extend from Calaveras Boulevard to Yosemite Road, along South Milpitas Boulevard.

SCOPE OF WORK

The purpose of this geotechnical study is to explore and evaluate subsurface conditions and develop site-specific geotechnical conclusions and recommendations for liquefaction potential consequences, and mitigation measures. Based on our understanding of the project, we propose that the scope of our work consist of the following:

1. Field Exploration Program. We will conduct a field exploration program consisting of drilling five borings. The borings will be 35 feet deep. We will obtain Standard Penetration Test (SPT), modified California, Shelby tube sample, and bulk samples of the soils, as appropriate for various soils encountered. We will obtain the required permits and verify clearance before initiation of the field exploration program. The field exploration program will be performed under technical supervision of a qualified geologist/engineer who has extensive experience on the field exploration for similar projects. Our geologist/engineer will record a log of each boring drilled and the conditions encountered at the site. We will dispose of the cuttings generated from the drilling operations and restore the ground surface to the original condition to the extent possible.

AGS

2. Geotechnical Laboratory Testing Program. We will perform a laboratory testing program on samples of earth materials obtained during the field exploration program. The laboratory tests will include moisture content, dry density, Atterberg limits, sieve analyses, and unconfined compression testing, as appropriate for various soils encountered.

3. Engineering Analyses and Report Preparation. We will perform engineering analyses using the field and laboratory data to develop geotechnical conclusions and recommendations for liquefaction potential, consequences, and mitigation measures.

   Our geotechnical findings, conclusions, and recommendations along with the supporting field and laboratory data will be presented in an engineering report. The report will address the following:

   - Subsurface soil conditions;
   - Groundwater elevations;
   - Local geologic conditions;
   - Faults and seismicity;
   - Peak ground surface accelerations for the controlling maximum credible earthquake;
   - Geoseismic hazardous including liquefaction potential, seismically-induced settlements, and seismically-induced lateral deformations;
   - Characterizing liquefaction hazards as very low, low, moderate, high, and very high, based on the criteria you provided;
   - Liquefaction mitigation and soil improvement recommendations;

   We will submit five copies of our draft report and ten copies of our final report.

4. Meetings and Consultation. We will meet and consult with your team and the consultants, as required during this phase of the project. We estimate that two meetings may be required during this phase of the study.

AGS

5. Preparation of a Liquefaction Potential Evaluation Procedure Manual. We will prepare a manual to summarize field, laboratory, and engineering analyses methods to be used for liquefaction potential evaluation of other sites in the City of Milpitas.

FEE AND SCHEDULE

We propose to perform our services on a time and materials basis to be billed in accordance with the attached fee schedule. Based on our understanding of the project, we estimate the cost of our services as follows:

Personnel Costs	Hours	Rate	
AGS Staff			
Sr. Principal Engineer	76 @	172.00	$ 13,072.00
Staff Engineer/Geologist A	108 @	100.00	10,800.00
		Subtotal	23,872.00
Other Costs			
Drill Rig (on-shore)	2.5 days	2,000.00	5,000.00
Grout Backfill			400.00
Drilling Supplies and Materials			600.00
Vehicles (4 days @ $50/day)			200.00
Permits			500.00
Cutting Disposal			500.00
Miscellaneous Costs (Reproduction, Delivery)			200.00
		Subtotal	7,400.00
		Fee @ 12%	888.00
		TOTAL	**$ 32,160.00**

The above cost is based on two and a half regular days of the drilling subcontractor's time. If the actual time spent in the field exceeds the assumed length of time, the cost of the study should be adjusted. We agree not to exceed the maximum cost of $32,160.00 without your approval.

The estimated cost also assumes that no significant soil and groundwater contamination will be encountered during field exploration program. If we encounter significant

AGS

contamination, we will stop the field program and will develop a new scope of work with you based on the level and extent of the contamination encountered.

We will start this study immediately following your authorization to proceed. We can initiate the field exploration program within two weeks following receipt of your notice to proceed depending upon availability of drill rig, weather conditions, and obtaining the required permits. We estimate that we can finish the field work in about three working days. A draft geotechnical study report and liquefaction evaluation manual will be ready for your review within six weeks following completion of the field exploration program. The final reports will be submitted within a week following receiving your comments on the draft report.

We appreciate the opportunity to submit this proposal. Please let us know if you have questions or need further information, (510) 251-1180, ext. 17.

Very truly yours,
AGS, Inc.

Bahram Khamenehpour, Ph.D., G.E.
Senior Vice President

Attachment
Fee Schedule

AGS

Mr. Andre Gharagozian
Damon S. Williams Associates, LLC
October 24, 2005
Page 5

HOURLY BILLING RATES (2003-2005)

Engineering Services for Water and Sewer Capital Improvement Projects
Various City of Milpitas Projects

PROFESSIONAL AND SUPPORT SERVICES	2003	2004	2005
Senior Principal AESP*	$165	$163	$172
Principal AESP	$140	$147	$154
Senior AESP	$120	$126	$132
Project AESP	$100	$105	$110
Staff AESP A	$ 90	$95	$100
Staff AESP B	$ 80	$84	$88
Senior DDCT**	$ 90	$95	$100
DDCT	$ 80	$84	$88
Senior Word Processor/Project Admin. Assist.	$ 65	$68	$72
Word Processor/Admin. Assist.	$ 55	$58	$61
Clerical	$ 45	$47	$50

* Architects, Engineers, Scientists, Project Administrators

** Designers, Drafters, CADD Specialists, Technicians

OTHER DIRECT COSTS

Reimbursable direct costs are billed at 1.12 times actual cost to cover the cost of general administrative expenses and handling. These reimbursable costs include, but are not limited to:

Consultant and Subcontracted Services
Travel: Airfare, Auto Rental, Parking
Subsistence: Lodging and Meals
Auto Mileage: $0.326 per mile
Field Vehicles: $50 per day
Nuclear Gauge: $50 per day
Nuclear Gauge: $60 per day
Conductivity/Temperature/pH Meter: $30 per day
CADD: $30 per hour
Misc. Costs: Field Expenses, Equipment Rental, Special Fees, Permits, Licenses, Insurance, Deposits, Printing, Reproduction, Express Mail, Delivery, Long Distance Telephone Charges, etc.

ATTACHMENT B
DETAILED FEE ESTIMATE

City of Milpitas
Water System Seismic Improvements Strategic Plan
Budget Estimate

Task	DSWA							G&E	AGS	DSWA	
	DSW	AG	CDL	CAD	J. Lewis	Clerical	ODCs	Seismic	Geotechnical	Hours	Total Cost
Task 1-Review Previous City Info. & Kickoff Mtg											$3,060
Task 2-Develop Facility Seismic Performance Criteria											$7,363
Task 3-Identify Backbone Water System & Components											$11,284
Task 4-Identify Prioritized Seismic Improvement Program											$8,915
Task 5-Identify Emergency Response & Recovery Components											$5,904
Task 6-Review Standard City Details											$3,793
Task 7-Prepare Project Report											$9,309
Task 8-FEMA Cost Benefit Analysis (Optional)											$13,975
Task 9-Optional Services (Grant Response and 7098 Review)	2	8			4	8	$203.00	$2,500		22	$5,176
Task 10-Project No 7098 Geotechnical Evaluations	4	12				8			$22,160	24	$26,182
Task 11-Develop Liquefaction Potential Manual	2	8			8	16			$10,000	34	$13,578
Labor Hours SubTotal	8	28	0	0	12	32				80	
Direct Labor Rate	$65.00	$48.00	$34.00	$24.60	$18.00	$24.00					
Burdened Rate (3.00 Multiplier)	$198.25	$146.40	$103.70	$75.03	$54.90	$73.20					
Labor Cost	$1,586	$4,099	$0	$0	$659	$2,342		$2,500	$32,160		$108,336
Other Direct Costs							$203				$203.00
Total Cost	$0							$0	$0		$108,539

Note: Tasks 1-8 have been authorized, billed out, and are closed
Note: Task 9 has been authorized for FEMA Grant Response Review and Waterline Project Review
Note: Tasks 10 and 11 are Additional Services Only.

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City of Milpitas Water System Seismic Improvements Strategic Plan
Fee Estimate for Additional Geotechnical Work, Tasks 10 and 11

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Currently Authorized Budget

Task Number	Total	DSWA	ABS	AGS
1	$3,060	$2,589	$471	$0
2	$7,363	$1,083	$6,280	$0
3	$11,284	$10,970	$314	$0
4	$8,915	$8,601	$314	$0
5	$5,904	$3,392	$2,512	$0
6	$3,793	$1,281	$2,512	$0
7	$9,309	$9,152	$157	$0
8	$13,975	$1,415	$12,560	$0
9	$5,176	$2,676	$2,500	$0
Total Tasks 1-9	**$68,780**	**$41,160**	**$27,620**	**$0**

Fee Summary for Additional Services

Task Number	Total	DSWA	ABS	AGS
10	$26,182	$4,022	$0	$22,160
11	$13,578	$3,578	$0	$10,000
Total Tasks 10+11 (Additional Services)	**$39,760**	**$7,600**	**$0**	**$32,160**
Total Tasks 1-11	**$108,539**	**$48,759**	**$27,620**	**$32,160**